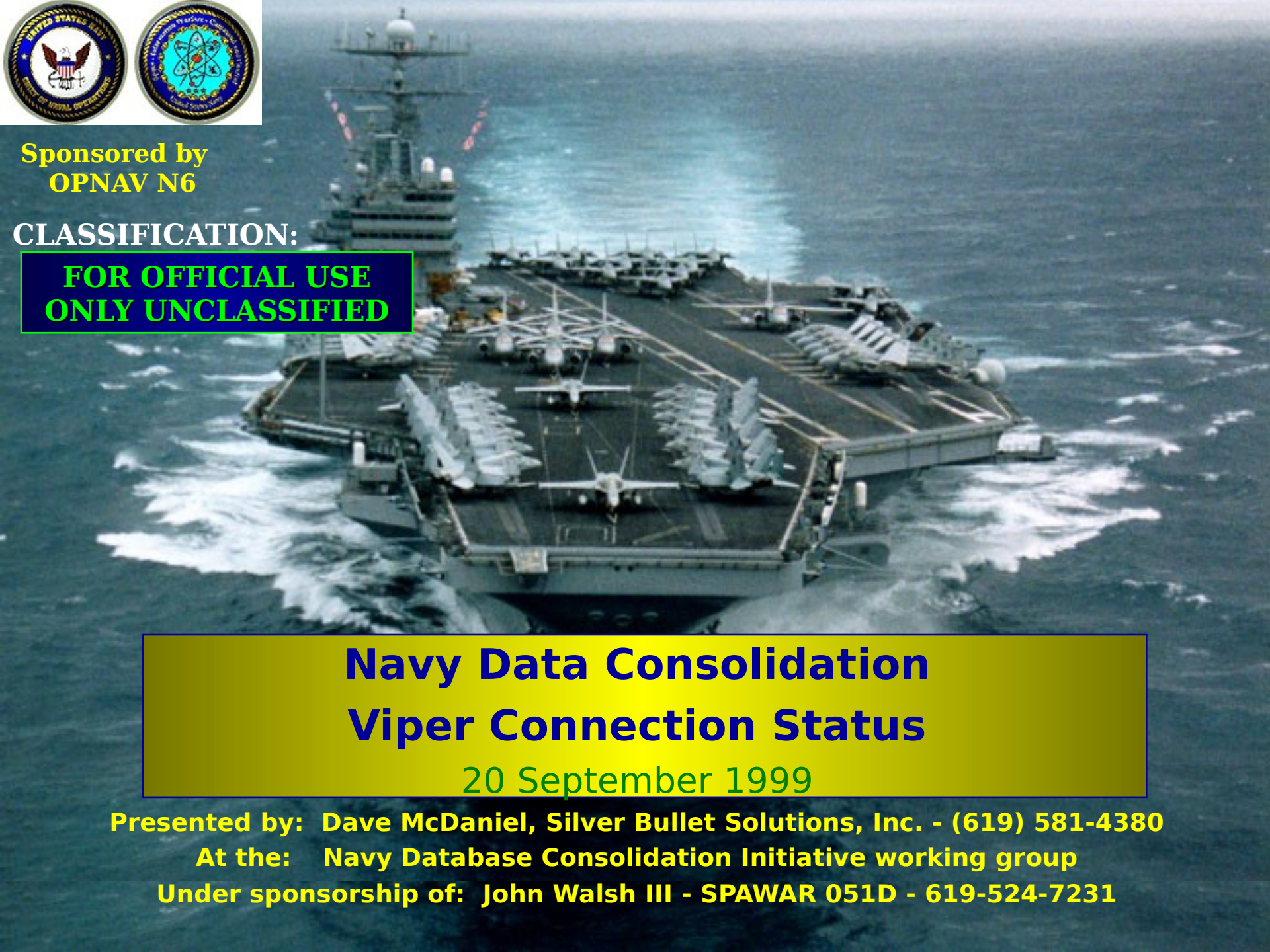


Sponsored by
OPNAV N6

CLASSIFICATION:

FOR OFFICIAL USE
ONLY UNCLASSIFIED

Navy Data Consolidation
Viper Connection Status

20 September 1999

Presented by: Dave McDaniel, Silver Bullet Solutions, Inc. - (619) 581-4380
At the: Navy Database Consolidation Initiative working group
Under sponsorship of: John Walsh III - SPAWAR 051D - 619-524-7231

Outline

1. Background
   - Why Viper?
2. Data Pull Status
3. Demonstration
   - Rationale
   - Steps
   - Configuration
4. Next

Why Deployment

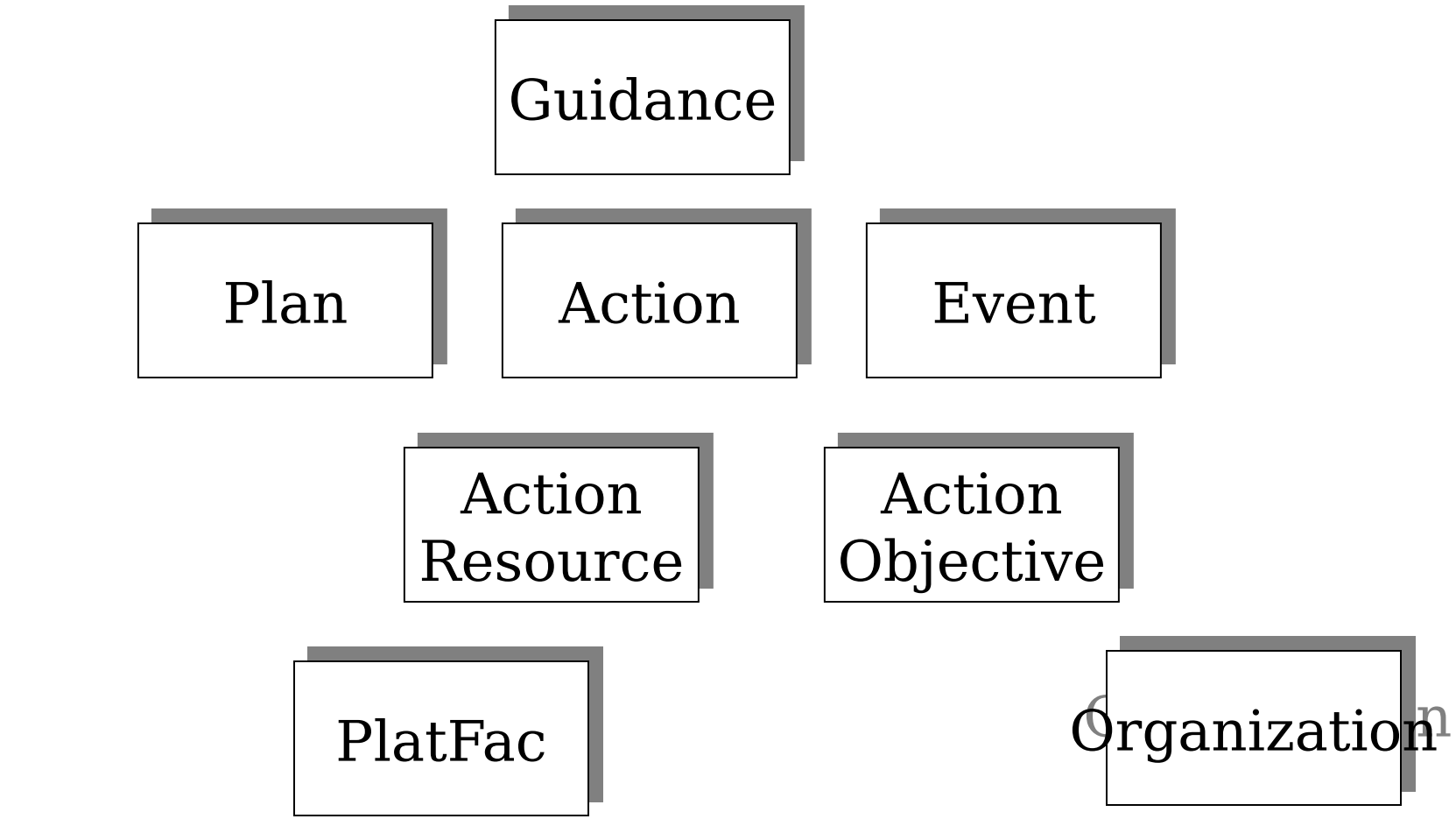
- Everyone needs
  - Battlegroup composition
  - When deploying
- Scope is small
- Source is known
- Prove NDC concept

Data Source for Deployment

- Viper is new system in OT&E
  - Installs at CINCs, 6 world-wide
  - Access client and local data with SQL Server shared data
- Replaces PCEMPSKED
- Does not follow DoD data standards (8320.1)
  - not a problem!

Design Overview for Deployment

Information Architecture - The Foundation of Network Centric Warfare



Data Pull Status

- Viper at CLF is an operational system
- Need to ensure zero impact
- PMW-157 Meeting
- Demonstrate at SSCSD
  - Requirements and Test plan being developed
  - Demonstration being setup in IADC lab
- Upon successful demonstration of zero impact, PMW-157 will OK connection setup at CLF

Requirements and Tests

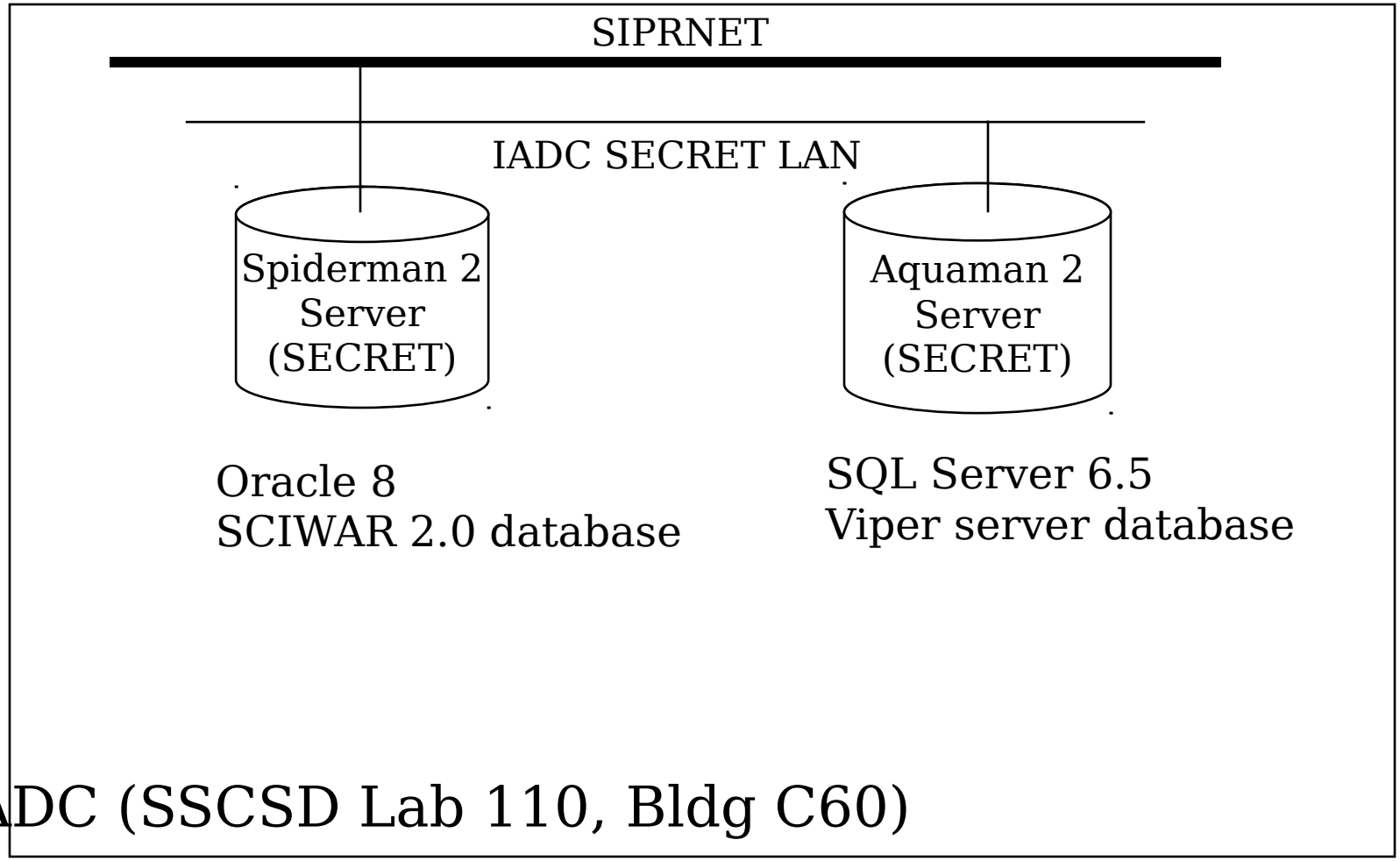
- Requirement
  - 25 Viper tables identified
  - Once a day pull, off-peak time
  - ODBC connect is easiest
- Tests
  - no performance degradation
  - no process contamination
  - no functional interference
- Being documented in a 498 STP

Viper Tables to Pull

Information Architecture - The Foundation of Network Centric Warfare

TableName	Description
DeployType_LU	Holds all the different types of Deployments, ie. ARG, CVBG…
MaintActivity	Holds various Maintenance Activities and most Shipyards, ie. NAV Shipyard Pearl Harbor.
ORG_ALL	Contains information about each ship
ORG_HOME_Port_LU	Contains all home ports (same as location name)
ORG_Task group	missing
SCHED_Command	Lists all Command code and names of Approval Authorities.
SCHED_Deployment	This is a look up table for the ORG_Taskgroup
SCHED_Events	Holds all the information regarding all the events in the Database.
SCHED_Geoloc	Holds the lists of all the locations in the database.
SCHED_HPTAlias	Contains the aliases for home ports
SCHED_LocationGroupDetails	Lookup table showing which location groups specific locations belong to.
SCHED_LocationGroups	User defined table for locations to be used in Reports.
SCHED_MaintFields	
SCHED_MajorCategory	Lists all the major categories in the database, lists color schemes, descriptions, etc.
SCHED_MessageDetails	Used to identify which messages have updated specific events.
SCHED_MinorCategory	List all the minor categories in the database with descriptions, color schemes and abbreviations.
SCHED_Msg_Command	Lookup table used to describe which UICs go with which Commands.
SCHED_Notional Template_LU	Maintenance lookup table used to describe notional templates.
SCHED_Notional Templates	/maintenance lookup table used to describe notional template listing for each template.
SCHED_Unit_Type_LU	Used to describe types of units.
SCHEDULE_EVENT_Type_LU	Lists all event types, homeport, major & concurrent employments, OPCON, & ASGN.
SCHEDULE_Proposed MaintUnit	
SCHEDULE_Unit	This table holds all the Approved Schedules on VIPER.
TaskForce_LU	
TaskUnit_LU	

Demonstration

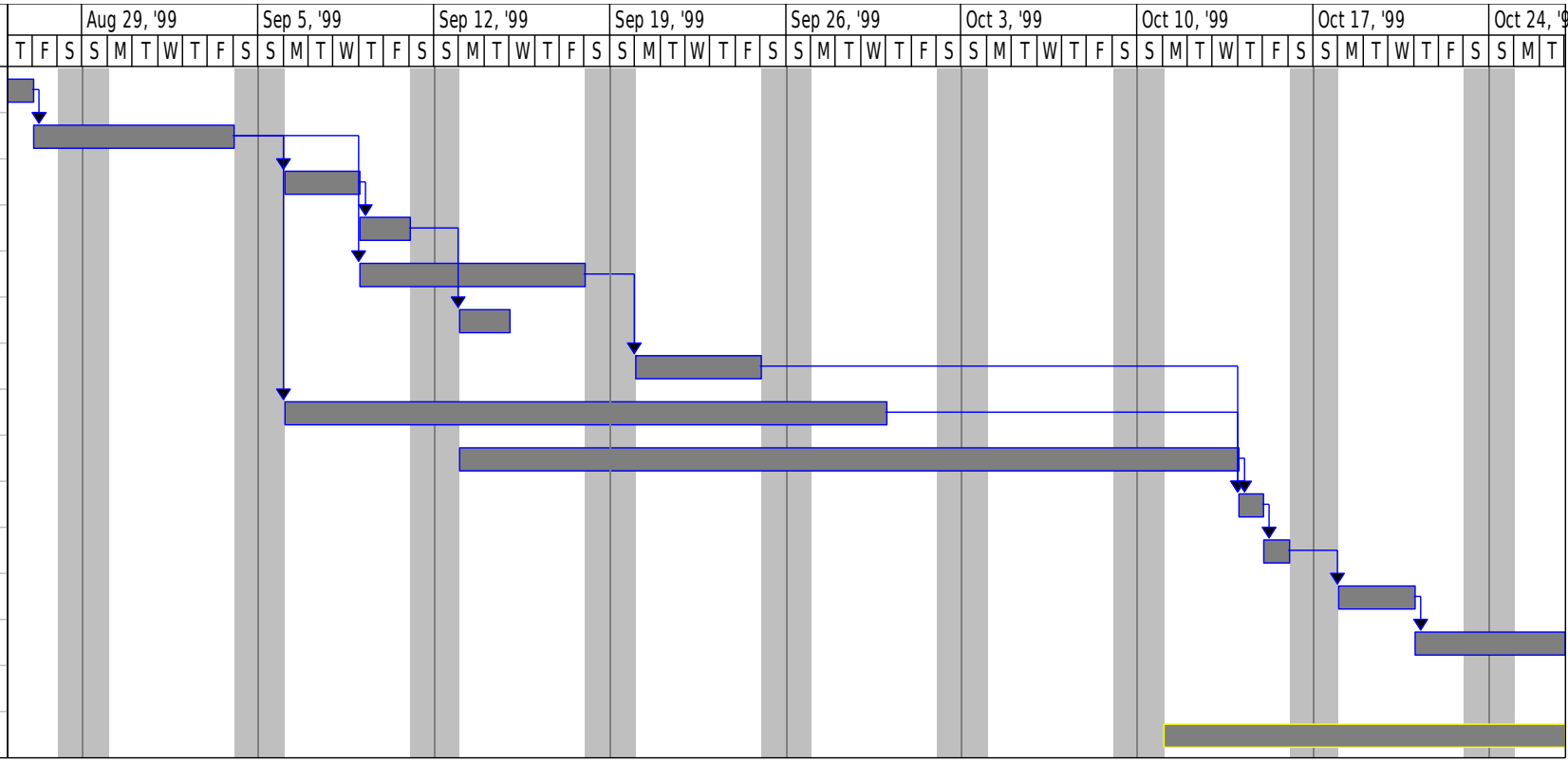


IADC (SSCSD Lab 110, Bldg C60)

Schedule

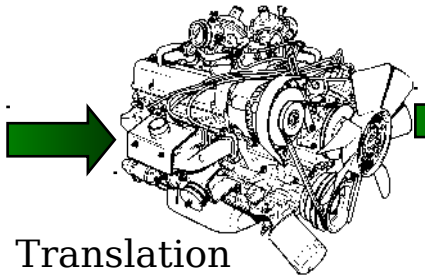
Information Architecture - The Foundation of Network Centric Warfare

ID	Task Name
1	Meet with PMW-157
2	Approval to Proceed
3	2's NT Installs
4	SCIWAR 2.0 Instal
5	Viper Server Install
6	ODBC Connect
7	Pull Program Develop
8	STP Develop
9	SIPRNET S/W Approval
10	PMW-157 Demonstrate
11	CLF Setup Account
12	IADC - CLF Connect
13	Manual Translate
14	Distribute to N6
15	Automatic Translate


Aug 29, '99
Sep 5, '99
Sep 12, '99
Sep 19, '99
Sep 26, '99
Oct 3, '99
Oct 10, '99
Oct 17, '99
Oct 24, '9
T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T W T F S S M T

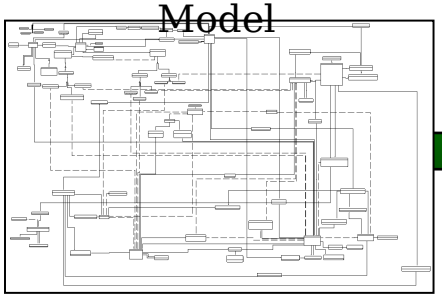
Then What?

Information Architecture - The Foundation of Network Centric Warfare



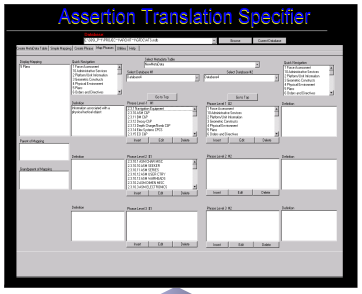
Translation Engine

Standards-Based Model

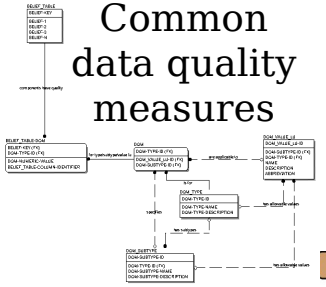


- Map
- Translate
- Attribute
- Fuse
- Distribute

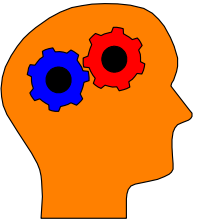
Fusion Rules

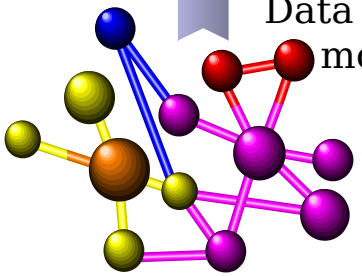


Translation Specification

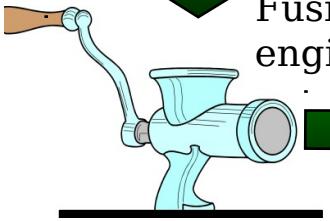


Common data quality measures





Data source model



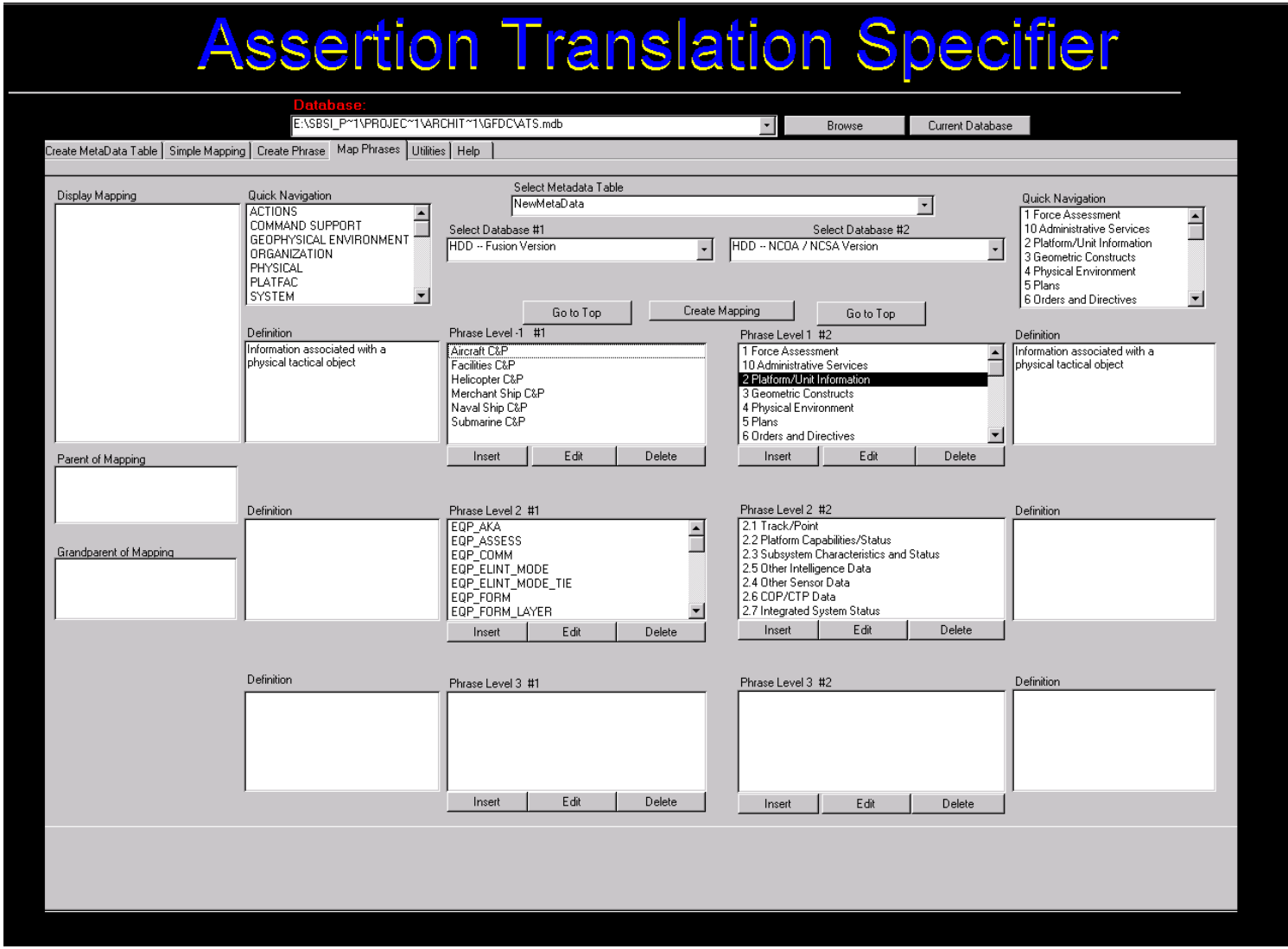
Fusion engine

Best estimate of info.

Mapping Tool

Information Architecture - The Foundation of Network Centric Warfare

- At Source, Table, Field, and Value levels
- Semi-auto aid



Backups

Navy Enterprise Data Model

Information Architecture - The Foundation of Network Centric Warfare

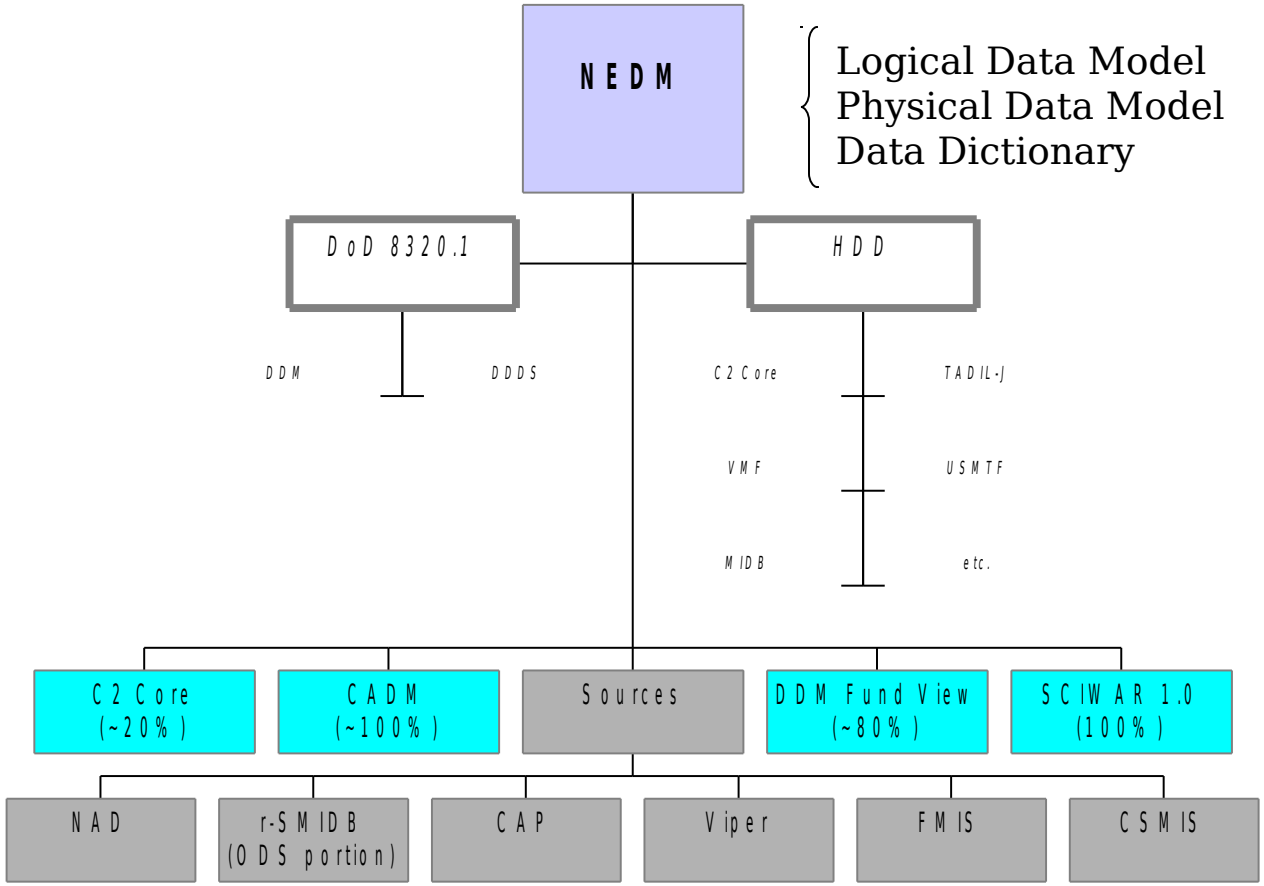
- Using Data Warehouse and / or Virtual DB technologies
- Design methodology
  - Navy Enterprise Data Model
  - Standards: CADM, 8320.1, DDDS / DDM, C2
  - Normalization: From existing SYSCOM and other sources and requirements

Top-down AND bottoms-up

- The “acquisition” and “operational” data environment’s have overlapping data

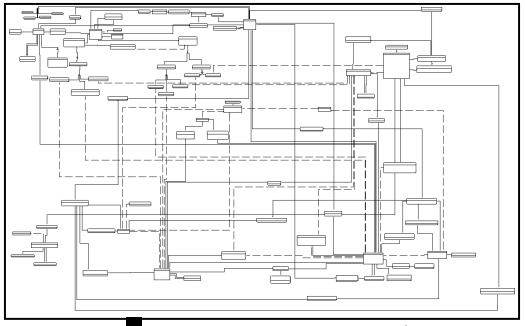
Current NCD Standards and Sources

Information Architecture - The Foundation of Network Centric Warfare



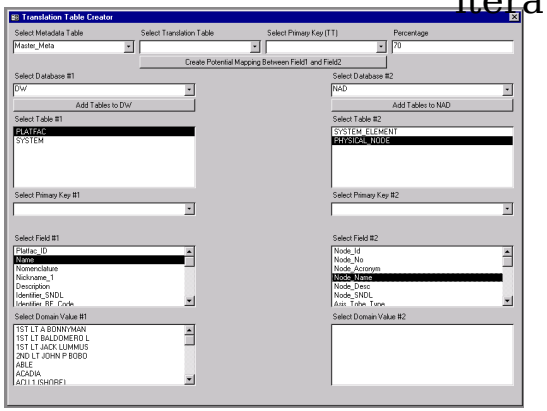
Top-Down / Bottom-Up Design

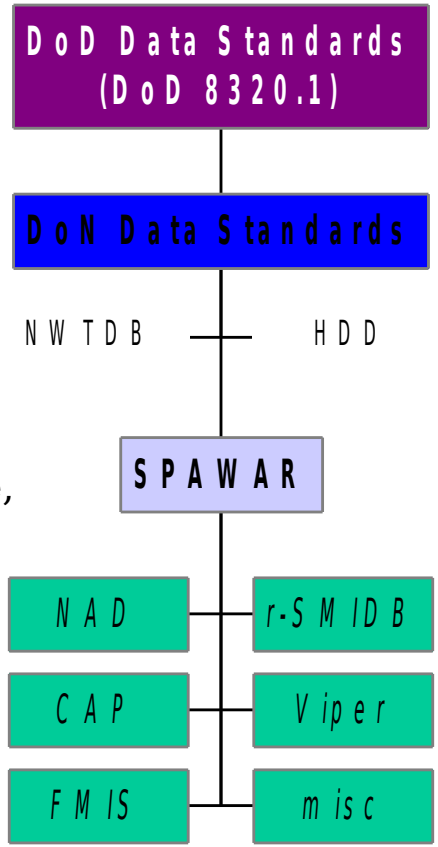
Information Architecture - The Foundation of Network Centric Warfare



Apply standards

Map, validate, and iterate





Enterprise-Level Developments

- Data engineered
- Wide-domain interoperable
- Data administrative -oriented

Departmental, End-User Developments

- Prototyped
- Satisfy local needs
- User-oriented

Need to map to sources from standard model to verify completeness and implementability